

Listing of the claims:

Claim 1-33: (cancelled)

34. (previously presented) A method for producing a soy protein concentrate, comprising the steps of:

- (a) providing a substantially defatted soybean material;
- (b) mixing the material with water and extracting proteins from the material;
- (c) removing insoluble materials to produce a liquor;
- (d) heat treating the liquor at a temperature above 93°C; and
- (e) subjecting the liquor to ultrafiltration using an ultrafiltration membrane having a molecular weight cutoff of up to 30,000 to provide a retentate;
- (f) optionally pasteurizing the retentate; and
- (g) drying the retentate to provide a soy protein concentrate.

35. (previously presented) The method of claim 34, wherein the ultrafiltration of said step (e) is conducted at a temperature of between about 25°C and about 50°C.

36. (previously presented) The method of claim 34, wherein the soy protein concentrate includes a protein content of between about 70.0 wt. % and about 85.0 wt. % of total dry matter; an isoflavones content of at least about 2.0 mg/g of total dry matter; and a crude fiber content of less than about 3.0 wt. % of total dry matter.

37. (previously presented) The method of claim 34, wherein the soy protein concentrate includes a protein content of between about 70.0 wt. % and about 85.0 wt. % of total dry matter; a soyasapogenols content of at least about 2.0 mg/g of total dry matter; and a crude fiber content of less than about 3.0 wt. % of total dry matter.

38. (cancelled)

39. (previously presented) The method of claim 34, wherein the ultrafiltration of said step (d) is conducted using an ultrafiltration membrane having a molecular weight cutoff of between about 10,000 and about 30,000.

40. (previously presented) The method of claim 34, wherein said step (b) further comprises adjusting the pH of the mixture to at least about 7.0.

41. (previously presented) The method of claim 34, wherein said step (b) further comprises adjusting the pH of the mixture to between about 7.0 and about 7.5.

42. (previously presented) The method of claim 34, wherein at least one of said steps (d) and (f) is conducted by jet cooking at a temperature above about 93°C.

43. (previously presented) The method of claim 34, wherein the mixture in said step (b) contains from about 5.0 wt. % to about 15.0 wt. % solids.

44. (previously presented) The method of claim 34, wherein the soy protein concentrate contains a combined raffinose and stachyose content of less than about 50.0 mg/g of total dry matter.

45. (previously presented) The method of claim 34, wherein the substantially defatted soybean material contains less than about 1.0 wt. % fat, and has a Protein Dispersibility Index ("PDI") of about 90.

46. (previously presented) The method of claim 34, wherein the substantially defatted soybean material contains about 30.0 wt. % to about 40.0 wt. % carbohydrates and about 5.0 wt. % to about 10.0 wt. % moisture.

47. (previously presented) A method for producing a soy protein concentrate, comprising the steps of:

- (a) providing a substantially defatted soybean material;
- (b) mixing the material with water and extracting proteins from the material;
- (c) removing insoluble materials to produce a liquor;
- (d) subjecting the liquor to ultrafiltration using an ultrafiltration membrane having a molecular weight cutoff of up to 30,000 at a temperature of between about 25°C and about 50°C to provide a retentate;
- (e) optionally pasteurizing the retentate; and
- (f) drying the retentate to provide a soy protein concentrate.

48. (previously presented) The method of claim 47, further comprising the additional step, prior to said step (d), of:

heat treating the liquor at a temperature above about 93°C.

49. (previously presented) The method of claim 48, wherein at least one of said step (d) and said heat treatment step is conducted by jet cooking at a temperature above about 93°C.

50. (previously presented) The method of claim 47, wherein the soy protein concentrate includes a protein content of between about 70.0 wt. % and about 85.0 wt. % of total dry matter; an isoflavones content of at least about 2.0 mg/g of total dry matter; and a crude fiber content of less than about 3.0 wt. % of total dry matter.

51. (previously presented) The method of claim 47, wherein the soy protein concentrate includes a protein content of between about 70.0 wt. % and about 85.0 wt. % of total dry matter; a soyasapogenols content of at least about 2.0 mg/g of total dry matter; and a crude fiber content of less than about 3.0 wt. % of total dry matter.

52. (cancelled)

53. (previously presented) The method of claim 47, wherein the ultrafiltration of said step (d) is conducted using an ultrafiltration membrane having a molecular weight cutoff of between about 10,000 and about 30,000.

54. (previously presented) The method of claim 47, wherein said step (b) further comprises adjusting the pH of the mixture to at least about 7.0.

55. (previously presented) The method of claim 47, wherein said step (b) further comprises adjusting the pH of the mixture to between about 7.0 and about 7.5.

56. (previously presented) The method of claim 47, wherein the mixture in said step (b) contains from about 5.0 wt. % to about 15.0 wt. % solids.

57. (previously presented) The method of claim 47, wherein the soy protein concentrate contains a combined raffinose and stachyose content of less than about 50.0 mg/g of total dry matter.

58. (previously presented) The method of claim 47, wherein the substantially defatted soybean material contains less than about 1.0 wt. % fat, and has a Protein Dispersibility Index ("PDI") of about 90.

59. (previously presented) The method of claim 47, wherein the substantially defatted soybean material contains about 30.0 wt. % to about 40.0 wt. % carbohydrates and about 5.0 wt. % to about 10.0 wt. % moisture.

Response
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Remarks

Double Patenting

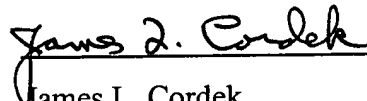
Claims 34-37, 39-51 and 53-59 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of copending Application No. 10/406,429. Submitted with this response is a terminal disclaimer to overcome the double patenting rejection. Reconsideration and withdrawal of this ground of rejection is respectfully requested.

Applicants believe that the foregoing comprises a full and complete response to the Office Action of record. Accordingly, favorable reconsideration and subsequent allowance of the pending claims are earnestly solicited.

If any additional fees are due in connection with the filing of this document, the Commissioner is authorized to charge those fees to our Deposit Account No. 50-0421.

Respectfully submitted,
Solae, LLC

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